encrypt the stored at least part of the D2D communication and cause it to be provided in encrypted form toward a node. Alternatively, the apparatus may be pre-configured with an encryption key that the apparatus may use to encrypt the at least part of the D2D communication before causing it to be provided in encrypted form toward a node.

[0038] In some embodiments, the apparatus is comprised in a trusted execution environment. The trusted execution environment may be comprised in a trusted execution apparatus. The trusted execution apparatus may comprise a trusted platform module cryptoprocessor, for example. An example of a trusted platform module cryptoprocessor is a secure smart card.

[0039] In some embodiments, the apparatus is comprised in a radio controller integrated chip. In these embodiments, the apparatus may have access to contents of the D2D communication on a low layer independently of a main processor of a mobile. In some embodiments, where the apparatus comprises a mobile, the mobile comprises a main processor and, separately, a trusted execution apparatus. In these embodiments, the trusted execution apparatus may be configured to indicate acceptance of the message such that the indication of acceptance is transmitted from the trusted execution apparatus to the main processor internally via electrical leads comprised in the mobile.

[0040] FIG. **2** illustrates a block diagram of an apparatus **10** such as, for example, a mobile terminal, in accordance with an example embodiment of the invention. While several features of the apparatus are illustrated and will be hereinafter described for purposes of example, other types of electronic devices, such as mobile telephones, mobile computers, portable digital assistants (PDAs), pagers, laptop computers, desktop computers, gaming devices, televisions, routers, home gateways, and other types of electronic systems, may employ various embodiments of the invention.

[0041] As shown, the mobile terminal **10** may include at least one antenna **12** in communication with a transmitter **14** and a receiver **16**. Alternatively transmit and receive antennas may be separate. The mobile terminal **10** may also include a processor **20** configured to provide signals to and receive signals from the transmitter and receiver, respectively, and to control the functioning of the apparatus. Processor **20** may be configured to control the functioning of the transmitter and receiver by effecting control signaling via electrical leads to the transmitter and receiver. Likewise processor **20** may be configured to control other elements of apparatus **10** by effecting control signaling via electrical leads connecting processor **20** to the other elements, such as for example a display or a memory. The processor **20** may, for example, be embodied as various means including circuitry, at least one processing core, one or more microprocessors with accompanying digital signal processor(s), one or more processor(s) without an accompanying digital signal processor, one or more coprocessors, one or more multi-core processors, one or more controllers, processing circuitry, one or more computers, various other processing elements including integrated circuits such as, for example, an application specific integrated circuit (ASIC), or field programmable gate array (FPGA), or some combination thereof. A processor comprising exactly one processing core may be referred to as a single-core processor, while a processor comprising more than one processing core may be referred to as a multi-core processor. Accordingly, although illustrated in FIG. **2** as a single processor, in some embodiments the processor **20** comprises a plurality of processors or processing cores. Signals sent and received by the processor **20** may include signaling information in accordance with an air interface standard of an applicable cellular system, and/or any number of different wireline or wireless networking techniques, comprising but not limited to Wi-Fi, wireless local access network, WLAN, techniques such as Institute of Electrical and Electronics Engineers(IEEE), 802.11, 802.16, and/or the like. In addition, these signals may include speech data, user generated data, user requested data, and/or the like. In this regard, the apparatus may be capable of operating with one or more air interface standards, communication protocols, modulation types, access types, and/or the like. More particularly, the apparatus may be capable of operating in accordance with various first generation, 1G, second generation, 2G, 2.5G, third-generation, 3G, communication protocols, fourth-generation, 4G, communication protocols, Internet Protocol Multimedia Subsystem(IMS), communication protocols, for example, session initiation protocol(SIP), and/or the like. For example, the apparatus may be capable of operating in accordance with 2G wireless communication protocols IS-136, Time Division Multiple Access (TDMA), Global System for Mobile communications(GSM), IS-95, Code Division Multiple Access (CDMA), and/or the like. Also, for example, the mobile terminal may be capable of operating in accordance with 2.5G wireless communication protocols General Packet Radio Service (GPRS), Enhanced Data GSM Environment(EDGE), and/or the like. Further, for example, the apparatus may be capable of operating in accordance with 3G wireless communication protocols such as Universal Mobile Telecommunications System(UMTS), Code Division Multiple Access 2000 (CDMA2000), WCDMA, Time Division-Synchronous Code Division Multiple Access(TD-SCDMA), and/or the like. The apparatus may be additionally capable of operating in accordance with 3.9G wireless communication protocols such as Long Term Evolution(LTE), or Evolved Universal Terrestrial Radio Access Network(E-UTRAN), and/or the like. Additionally, for example, the apparatus may be capable of operating in accordance with fourth-generation, 4G, wireless communication protocols such as LTE Advanced and/or the like as well as similar wireless communication protocols that may be developed in the future.

[0042] Some Narrow-band Advanced Mobile Phone System (NAMPS), as well as Total Access Communication System(TACS), mobile terminal apparatuses may also benefit from embodiments of this invention, as should dual or higher mode phone apparatuses, for example, digital/analogue or TDMA/CDMA/analogue phones. Additionally, apparatus **10** may be capable of operating according to Wi-Fi or Worldwide Interoperability for Microwave Access (WiMAX) protocols.

[0043] It is understood that the processor **20** may comprise circuitry for implementing audio/video and logic functions of apparatus **10**. For example, the processor **20** may comprise a digital signal processor device, a microprocessor device, an analogue-to-digital converter, a digital-to-analogue converter, and/or the like. Control and signal processing functions of the mobile terminal may be allocated between these devices according to their respective capabilities. The processor may additionally comprise an internal voice coder (VC), **20***a*, an internal data modem (DM), **20***b*, and/or the like. Further, the processor may comprise functionality to operate one or more software programs, which may be stored in memory. In general, processor **20** and stored software instructions may be configured to cause apparatus **10** to perform